

New England Biolabs Certificate of Analysis

Product Name: *Swal*

Catalog Number: *R0604S*

Concentration: *10,000 U/ml*

Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of pXba DNA in 1 hour at 25°C in a total reaction volume of 50 µl.*

Packaging Lot Number: *10070521*

Expiration Date: *01/2022*

Storage Temperature: *-20°C*

Storage Conditions: *400 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*

Specification Version: *PS-R0604S/L v2.0*

Swal Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0604SVIAL	Swal	10064244	Pass
B7203SVIAL	NEBuffer™ 3.1	10072160	Pass

Assay Name/Specification	Lot # 10070521
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 100 units of Swal incubated for 4 hours at 25°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of pXba-NdeI DNA with Swal, ~75% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, ~75% can be recut with Swal.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of pXba DNA and a minimum of 100 units of Swal incubated for 16 hours at 25°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass

This product has been tested and shown to be in compliance with all specifications.



Penghua Zhang
Production Scientist
08 Jun 2020



Michael Tonello
Packaging Quality Control Inspector
08 Jun 2020